

Installation Instructions

Door Fan Replacement for E1h/E2h Drives VLT® FC Series FC 102, FC 103, FC 202, and FC 302

Description

The door fan replacement kit contains parts required to install 1 door fan in E1h/E2h drives in IP21/IP54 enclosures.

Kit Ordering Number

Kit number	Kit description	
176F6636	Door fan for E1h/E2h drives	

Table 1.1 Ordering Number for the Door Fan Kit

Items Supplied

The door fan replacement kit contains the following:

- 1 fan
- Installation instructions

Safety Instructions

Only qualified, Danfoss authorized personnel are allowed to install the parts described in these installation instructions. Handling of the drive and its parts must be done in accordance with the corresponding *operating guide*.

AWARNING

ELECTRICAL SHOCK HAZARD

VLT® FC series drives contain dangerous voltages when connected to mains voltage. Improper installation, and installing or servicing with power connected, can cause death, serious injury, or equipment failure.

To avoid death, serious injury, or equipment failure:

- Only use qualified electricians for the installation.
- Disconnect the drive from all power sources before installation or service.
- Treat the drive as live whenever the mains voltage is connected.
- Follow the guidelines in these instructions and local electrical safety codes.

AWARNING

DISCHARGE TIME

The drive contains DC-link capacitors, which can remain charged even when the drive is not powered. High voltage can be present even when the warning LED indicator lights are off. Failure to wait 40 minutes after power has been removed before performing service or repair work can result in death or serious injury.

- Stop the motor.
- Disconnect AC mains and remote DC-link power supplies, including battery back-ups, UPS, and DClink connections to other drives.
- Disconnect or lock PM motor.
- Wait 40 minutes for capacitors to discharge fully.
- Before performing any service or repair work, use an appropriate voltage measuring device to make sure that the capacitors are fully discharged.

Removing the Door Fan

The enclosure door includes 2 fan assemblies at the door top. To remove and replace the door fan, use the following procedures. Refer to *Illustration 1.1*.

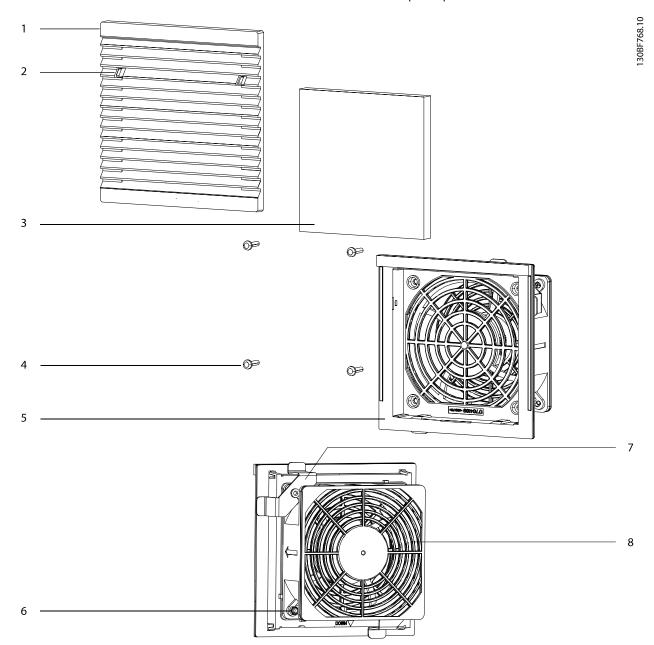
- 1. Pinch together the release tabs on the front grill and remove the grill from the enclosure door.
- 2. Remove the fan filter.
- 3. Inside the enclosure door, unplug the in-line connector attaching the fan cable.
- 4. Detach 4 screws (T20), 2 nuts, and 2 corner brackets from the corners of the fan. When removing the screws, hold each nut (7 mm) with a wrench on the opposite side of the fan.
- 5. Remove the fan from the enclosure door.

Installing the Door Fan

- Position the fan in the door of the enclosure. Check that the air direction arrows point away from the internal drive components when the door is closed.
- 2. On the inner side of the door, replace the 2 brackets at opposite corners of the fan and secure with 2 screws (T20).



- 3. Replace 2 screws in the remaining 2 corners of the fan, securing each with a nut (7 mm).
- 4. Reconnect the in-line cable connector attaching the fan cable.
- 5. Replace the filter over the fan on the outside of the
- 6. Reposition the fan grill over the filter and press to snap into place.



1	Front grill	5	Door fan front view
2	Release tab	6	Nut (7 mm)
3	Fan filter	7	Corner bracket
4	Screw (T20)	8	Door fan back view

Illustration 1.1 Door Fan Assembly

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